

**Report to Congress:**

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# **Rural Health Care Transition Grant Program**

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**U.S. Department of Health and Human Services  
Health Care Financing Administration**

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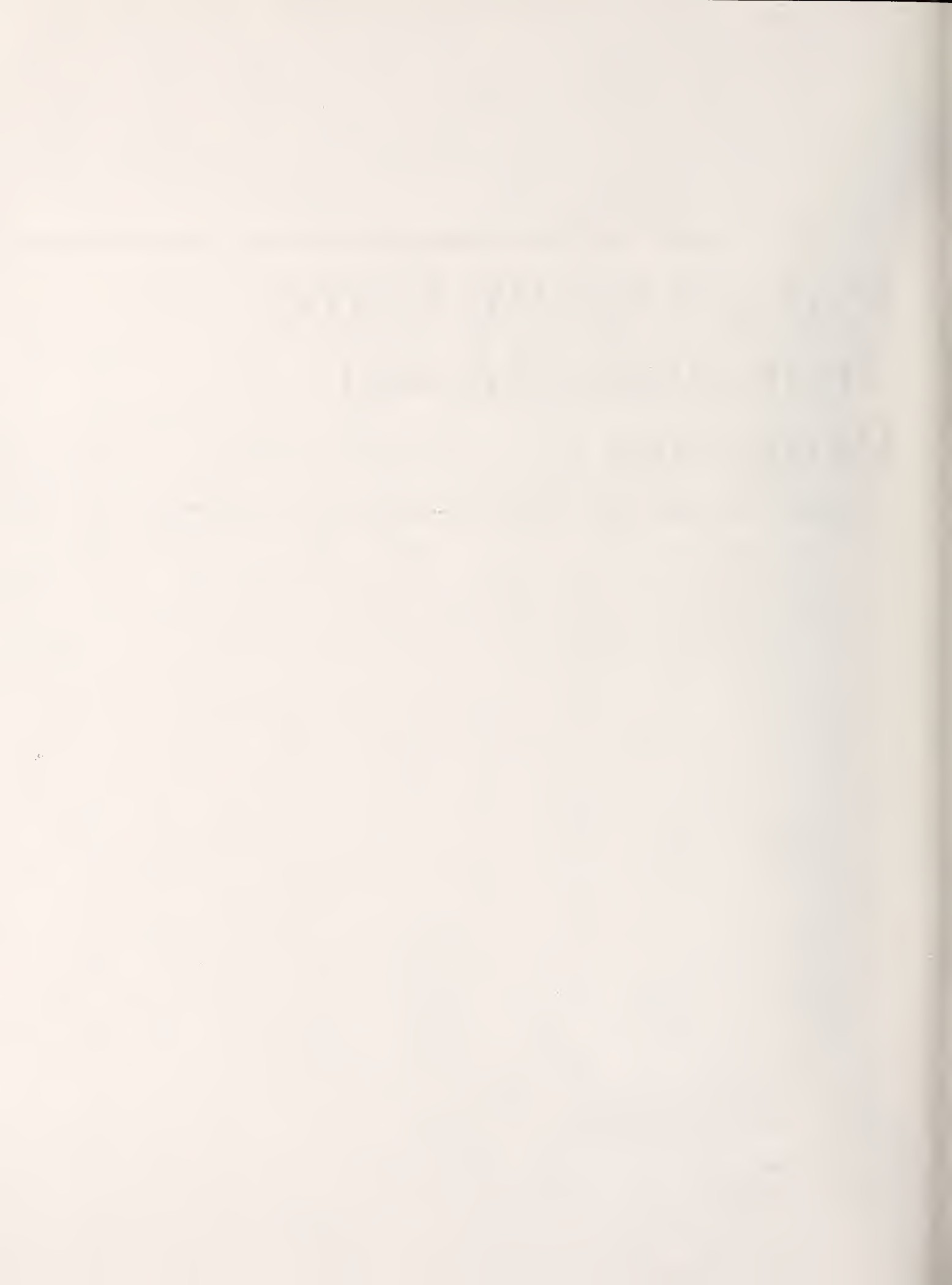
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**U.S. Department of Health and Human Services  
Health Care Financing Administration**

**September 1990  
HCFA Pub. No. 03308**



## CONTENTS

<u>Chapter</u>		<u>Page</u>
	EXECUTIVE SUMMARY .....	iv
I	INTRODUCTION AND BACKGROUND TO THE RURAL HEALTH CARE TRANSITION GRANTS PROGRAM .....	1
	A. CHARACTERISTICS OF THE RURAL HEALTH CARE ENVIRONMENT .....	1
	B. LEGISLATIVE HISTORY AND PURPOSE OF THE GRANT PROGRAM .....	3
	C. OVERVIEW OF THE PROCESS AND RESPONSE .....	6
II	DESCRIPTION OF THE GRANTEE SELECTION PROCESS .....	9
	A. SOLICITING AND SCORING THE APPLICATIONS .....	9
	1. Results of the Scoring Process .....	10
	2. Adjusting the Score for Panel Variation .....	12
	B. SELECTING THE FUNDED GRANTS .....	14
III	DESCRIPTION OF THE ELIGIBLE, APPLICANT, AND GRANTEE HOSPITALS ..	20
	A. GEOGRAPHIC DISTRIBUTION OF THE APPLICANTS AND THE GRANTEE HOSPITALS .....	20
	B. COUNTY CHARACTERISTICS .....	23
	1. Demographic Characteristics .....	23
	2. Facility Access .....	26
	3. Access to Health Professionals .....	28
	4. Summary of Area Characteristics .....	31
IV	DESCRIPTION OF THE PROJECTS .....	33
	A. TYPES OF PROPOSALS RECEIVED .....	33
	B. TYPES OF PROJECTS FUNDED .....	41
	C. FUNDING AMOUNTS .....	44
	1. Federal Funding .....	44
	2. External Support .....	47
	D. LOCAL AREA COOPERATION .....	49

CONTENTS (continued)

<u>Chapter</u>		<u>Page</u>
V	MONITORING PROCESS AND FUTURE REPORTS .....	54
A.	MONITORING PROCESS .....	54
1.	Hospital Reports .....	54
2.	Site visits .....	55
B.	FUTURE REPORTS .....	55
	REFERENCES .....	57
	APPENDIX A: THE LEGISLATION .....	A.1
	APPENDIX B: SCORE ADJUSTMENT PROCESS .....	B.1
	APPENDIX C: LIST OF GRANT WINNERS .....	C.1
	APPENDIX D: DATA SETS FOR THE ANALYSIS .....	D.1

## EXECUTIVE SUMMARY

In response to the severe financial distress of many rural hospitals, Congress mandated a program of Rural Health Care Transition Grants, to be awarded to rural hospitals with the goal of increasing their long-term financial stability and management capacity (Omnibus Budget Reconciliation Act of 1987: PL 100-203). The Health Care Financing Administration (HCFA) is charged with implementing the program. Funding of \$8,892,000 was appropriated for the grant program and its evaluation.

In January 1989, HCFA solicited applications from over 2,500 small rural hospitals in 46 states and the Commonwealth of Puerto Rico (Connecticut, Delaware, Rhode Island, and New Jersey do not contain eligible rural hospitals). Applications were submitted to State Governors' offices by March 17, 1989 and awards were made on September 15, 1989. Awards of up to two years duration and up to \$50,000 a year were made.

HCFA received 704 applications for 529 proposed projects from 45 States and the Commonwealth of Puerto Rico (although Massachusetts had eligible hospitals, none applied). There were 470 proposals from individual hospitals with the remaining 234 applications from 59 hospital consortia. The 529 project proposals were reviewed and scored by independent technical reviewers. Grant funds were awarded based on technical merit score and with the goal of achieving geographic dispersion of the available grant funds. Each state was assigned a pool of funds reflecting its proportion of eligible hospitals. The highest scoring proposals within each state were then awarded grants (157 grants). The small pool of funds that remained was allocated to the next highest scoring proposals, regardless of state (a further 27 projects were funded in this process). A total of 184 grant awards were made to 181 hospitals, representing 155 different projects.

Hospitals that applied to the grant program are located in areas that generally have demographic characteristics very similar to the areas of all eligible rural hospitals. These rural areas are, however, markedly different from the average United States county in several ways. The areas are more sparsely populated, the population tends to be older, and a lower proportion of the population is nonwhite. The areas with grantees are very similar to the areas with hospitals which applied but were not funded and reflect the general rural population.

There was diversity in the types of projects proposed by applicants. Most popular were staff recruitment and developmental programs, particularly for primary care physicians and nurses. Transportation projects were also popular. Among funded grants, these patterns also held. However, relative to applications, a greater proportion of the funded grants were for long term care services, particularly adult day care, respite

care and hospices; and for outpatient services, particularly outpatient mental health and ambulance services.

A report on the progress of the grantees will be prepared every six months of the program. Progress will be monitored through hospital reports that will be submitted every six months and visits to selected grantees. A final report will be prepared evaluating the impact of the programs. The findings will be incorporated in a practical guide for rural hospitals.



## I. INTRODUCTION AND BACKGROUND TO THE RURAL HEALTH CARE TRANSITION GRANTS PROGRAM

Health care delivery in rural areas has faced many challenges in the 1980s. Since rural hospitals tend to be smaller and more isolated than urban hospitals, they may be particularly sensitive to the changes in reimbursement policies and demographic structure that have affected health care provision in recent years. The introduction of prospective payment for hospitalization by both public and private payors, the shift from inpatient to outpatient care, the shortage of some health care personnel in rural areas, the lower payment amount for Medicare patients in rural hospitals and the increased competition for patients has affected the rural hospital's revenue and may have adversely affected their financial viability. In addition, rural hospitals serve an older population with a higher proportion of uninsured than its urban counterpart. There have been a number of rural hospital closures during recent years, which has created concern about access to health care in rural areas. In response to this concern, Congress funded the Rural Health Care Transition Grants Program.

### A. CHARACTERISTICS OF THE RURAL HEALTH CARE ENVIRONMENT

Like the population elsewhere, the rural population is becoming older, poorer, and less likely to be insured. The percentage of the population nationwide that is 65 years or over rose from 9.8 percent in 1970 to 12.2 percent in 1987; furthermore, rural areas have a higher percentage of elderly--13.0 percent in 1980, relative to 10.7 percent in metropolitan areas and 11.3 percent nationwide (U.S. Bureau of the Census, 1989). The proportion of the rural population living in poverty increased from 14 to 18 percent

from 1980 to 1987, while the proportion of individuals without insurance increased from 37 to 39 percent (U.S. Congress, 1988).

These changes in the characteristics of the rural population have several implications for health care services. First, need is increasing, since the elderly and low income persons tend to have greater health problems that require health care (Rowland and Lyons, 1989). Second, the growing uninsured population increases the amount of bad debt hospitals are likely to incur. Third, the decreasing proportion of persons in their working years implies a reduced tax base to support community subsidization of local hospitals. This is especially important since 45 percent of rural hospitals are government owned, in contrast to just 16.5 percent of the urban hospitals (Moscovice, 1989).

At the same time that demographic changes were taking place, the payment mechanism for Medicare was changed in the early 1980s. The introduction of prospective payment coincided with, and probably was significant in reducing lengths of hospital stay and decreasing hospital admissions. By 1985, rural hospital occupancy rates were as low as 56 percent on average. The excess capacity of hospital beds means there are fewer patients to spread the typical rural hospital's costs, while the decrease in inpatient utilization has decreased revenues. As a result, Medicare profit margins fell from 7 percent in 1985 to negative 2.4 percent in 1987 (Kusserow). This statistic suggests that many rural hospitals may be in severe financial trouble.

Medicare's prospective payment system rates to rural hospitals were initially set 25 percent lower than those of urban hospitals because their costs in the preceding years

(upon which the rates were based) had generally been lower. Despite subsequent changes in the payment rates, small rural hospitals (those with less than 100 beds), are still on the financial edge (Hospitals, 1988).

These changes in the rural health care environment together with continuing staffing shortages have made service availability in rural areas an issue of growing concern. Since the mid 1960s, 446 hospitals in rural areas have left the Medicare program (Zimmerman, 1988). In an effort to thwart closure, some hospitals have tried to develop multi-hospital systems, but it is doubtful that this will solve the small, rural hospital's financial problems (Berry, Tucker and Seavey, 1987). Given the demographic, economic, reimbursement and utilization trends of rural areas it is expected that more rural hospitals will close over the next few years (Moscovice, 1988). The implication of rural hospital closures for the rural population is decreased access to health care, increased health care costs for rural patients who are forced to travel further for health services, and negative economic effects on the local economy.

## **B. LEGISLATIVE HISTORY AND PURPOSE OF THE GRANT PROGRAM**

The Congressional concerns about the problems of rural hospitals and access to health care for the residents of rural areas led to the enactment of the Grant Program for Rural Health Care Transition.

In the legislation, Congress mandated that HCFA "establish a program of grants to assist eligible small rural hospitals and their communities in the planning and implementation of projects to modify the type and extent of services such hospitals provide in order to adjust one or more of the following factors:

- (1) Changes in clinical practice patterns
- (2) Changes in service populations
- (3) Declining demand for acute-care inpatient hospital capacity
- (4) Declining ability to provide appropriate staffing for inpatient hospitals
- (5) Increasing demand for ambulatory and emergency services
- (6) Increasing demand for appropriate integration of community health services
- (7) The need for adequate access to emergency care and inpatient care in areas in which a number of underutilized hospital beds are being eliminated."<sup>1</sup>

The legislation further stipulates that "a grant may not exceed \$50,000 a year and may not exceed a term of two years."<sup>2</sup> Funds may be spent for any expenses incurred in planning and implementing the project with two exceptions: no part of the grant funds may be expended to retire debt incurred before September 15, 1989<sup>3</sup>; and, no more than one-third of the grant funds may be used for capital-related costs. The legislation mandated that hospitals must be nonfederal, nonproprietary, short-term, general acute care with fewer than 100 beds and paid as a rural hospital under Medicare's Prospective Payment System, to be eligible for the program.

The conference agreement on the fiscal year 1989 HCFA appropriation includes \$8.9 million to fund this grant program, including the independent evaluation of the

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<sup>1</sup>Omnibus Budget Reconciliation Act of 1987 (PL 100-203), Section 4005 (e).

<sup>2</sup>Ibid.

<sup>3</sup>Date of grant award.

effectiveness and impact of the program. After providing funds for administration, monitoring, and evaluation of the grants, there was approximately \$8.3 million available to fund the grants for FY 1989. In accordance with the direction of Congress, included in the Dire Emergency Supplemental Appropriation Act of 1989 (P.L. 100-45), HCFA allocated all of the available funds for the first year of the grants instead of awarding both years of the grants from the 1989 appropriation. This had the effect of maximizing the number of awards. The conference committee report that accompanied the legislation stated that the "conferees expect HCFA to award at least 160 first-year grants of \$50,000 to rural hospitals. The conferees intend to provide second-year funding for this program in fiscal year 1990."

The legislation specifies that grantees must supply information needed to evaluate the grant program and to ensure that grant funds are expended as they were proposed. The Congress further required that the HCFA Administrator report to the Congress on the progress of the funded projects every six months and within six months of the end of the grant program. This is the first report on the grant program. This report describes the process of soliciting and selecting the grantees; the characteristics of the areas in which eligible hospitals, applicant hospitals and funded hospitals are located; and the grant proposals to be undertaken. Future reports will describe the progress of

the projects, problems encountered and their proposed resolutions. The last report will evaluate which projects worked and why.<sup>4</sup>

### C. OVERVIEW OF THE PROCESS AND RESPONSE

In designing the grant program and the solicitation materials, HCFA consulted with a number of interested organizations: the Office of Rural Health Policy, the American Hospital Association, the National Rural Health Association, the National Governors' Association and the National Association of Counties.

On January 17, 1989 the Health Care Financing Administration mailed grant application materials to over 2,500 hospitals which were potentially eligible for the Rural Health Care Transition Grant Program.<sup>5</sup> One or more applications for the program were received from 677 (or approximately 39 percent), of all potentially eligible hospitals, for a total of 704 applications. Applications were received from hospitals in 45 states and the Commonwealth of Puerto Rico. Connecticut, Delaware,

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<sup>4</sup>These reports are being prepared by Mathematica Policy Research Inc. (MPR) under contract to the Health Care Financing Administration (contract number 500-87-0028-12).

<sup>5</sup>The rapidly changing status of hospitals makes it impossible to identify all eligible hospitals at any given point in time; hospitals continuously open/close, change their management structure and open/close beds. The best estimate of the number of eligible hospitals at the beginning of the solicitation process was 1,738. In order to insure that all potentially eligible hospitals were informed about the program, 2,500 hospitals that were close to the eligibility guidelines were sent program announcements. After the solicitation process was completed, 87 hospitals who were not on the original list of eligible hospitals were identified, increasing the estimated number of rural hospitals to 1,815.

Rhode Island, and New Jersey do not contain eligible rural hospitals. Massachusetts did not have any eligible rural hospitals apply. Of the 704 applications, 470 were from individual hospitals. The remaining 234 applications were submitted for 59 consortium projects. Thus, in total there were 529 proposed projects; 470 involving individual hospitals and 59 involving hospital consortia. Table I.1 shows the distribution of the hospitals within these consortia. The largest consortium involved 15 hospitals. However, the majority of the consortia contained a much smaller number of hospitals—typically just two or three.

The proposed projects varied in nature, including such diverse projects as developing a library of health information to remodeling the hospital's surgical facilities. Over 34 percent of the projects were planning and implementation projects, while only 3.6 percent were pure planning grants. The overwhelming majority (91.9 percent) of the proposed projects were for two years (the maximum time period allowed by the statute at that time), and most applicants requested the maximum amount of funding (\$100,000). In total, \$61,103,804 in federal funds was requested by the applicants. Since this amount greatly exceeded the funds available for the grant program, only selected proposals could be funded. The selection process is described in Chapter II.

TABLE I.1

DISTRIBUTION OF THE NUMBER OF HOSPITALS PER CONSORTIUM

Number of Hospitals in the Consortium	Number of Consortium Proposals	Total Number of Applications
2	20	40
3	12	36
4	11	44
5	6	30
6	4	24
7	0	0
8	3	24
9	1	9
10	0	0
11	0	0
12	1	12
13	0	0
14	0	0
15	1	15
TOTAL	59	234



## II. DESCRIPTION OF THE GRANTEE SELECTION PROCESS

### A. SOLICITING AND SCORING THE APPLICATIONS

To begin the solicitation process, the Health Care Financing Administration (HCFA) sent an information letter and application materials to over 2,500 rural, non-profit hospitals. To be eligible to receive a grant, a hospital had to be a non-Federal, non-proprietary, short-term, general acute care hospital with fewer than 100 beds and had to be classified as a rural hospital under Medicare's Prospective Payment system.<sup>1</sup> Additional hospitals contacted HCFA requesting application materials, and these were sent to them. Applicants were instructed to return their application to their state Governor (as required under the statute) by March 17, 1989. The Governors were required to submit the applications to HCFA by April 17, 1989. HCFA received a total of 704 applications.

Applications were separated into consortium and individual hospital applications. Twenty-five two-person panels each reviewed 20 to 25 individual hospital applications, while five panels reviewed 10 to 12 consortia applications (since a typical consortia is comprised of 3 hospitals, this represents about 30 to 36 hospitals per consortium panel). Applications were distributed to panel members who resided in a different geographic area (the census division) than the applicants they were reviewing to minimize the possibility that reviewers had previous knowledge of the hospitals.

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<sup>1</sup>PL 100-203, Sec. 4005(e).

The panel members applied five criteria mandated by Congress in rating the proposals:

1. Understanding the problem the project was to address (maximum score--20 points).
2. Likelihood that the project would have a successful impact (maximum score--30 points).
3. Impact that the project would have on Medicare beneficiaries' access to care (maximum score--20 points).
4. Degree of coordination exhibited with the community, and within the consortium for consortium applicants (maximum score--20 points).
5. Likelihood that the project would reduce Medicare expenditures (maximum score--10 points).

The panel scores and the reviewers' comments and recommendations were submitted to HCFA by June 19, 1989.

#### 1. Results of the Scoring Process

Table II.1 shows the average proposal score for each of the five rating criteria. We see that the hospitals generally scored highest on the first criterion, the understanding of the problem, and lowest on the fifth criterion, the likelihood that the project would reduce Medicare expenditures.

Table II.1 shows that the criterion scores ranged from zero to the maximum allowed, reflecting the wide range in the quality of the proposals (see Chapter II, section C). Applicants tended to score very high on the first two criteria, understanding the nature of the problem and likelihood of successful impact, with about one-third of the

TABLE II.1

## PROPOSAL SCORES BY SCORING CRITERION

	<u>Range of Scores</u>		Average Score	Maximum Possible Score
	<u>Lowest</u>	<u>Highest</u>		
Understand the Problem	0	20	13.4	20
Successful Impact	0	30	18.3	30
Access to Care	0	20	12.4	20
Coordination	0	20	11.9	20
Reduce Medicare Expenditures	0	10	5.2	10
Final Assigned Score	0	100	61.1	100

applicants obtaining 80 percent of the available points. Applicants generally scored fairly well on the criteria improving access to care and the degree of coordination, typically receiving more than half of the points. However, many applicants scored poorly on the likelihood of reducing Medicare expenditures. Fifty percent of the applicants received less than 50 percent of the maximum points for this criterion.

## 2. Adjusting the Score for Panel Variation

Despite the best efforts to standardize the scoring process, it is to be expected that some of the variation exhibited in the scores is due to differences in the scoring tendencies of the 30 different panels rather than to differences in the quality of the proposals. In addition, some panels assigned scores with a wider range of values than other panels. In order to ensure that the scores were comparable across panels they were adjusted using standard statistical techniques.

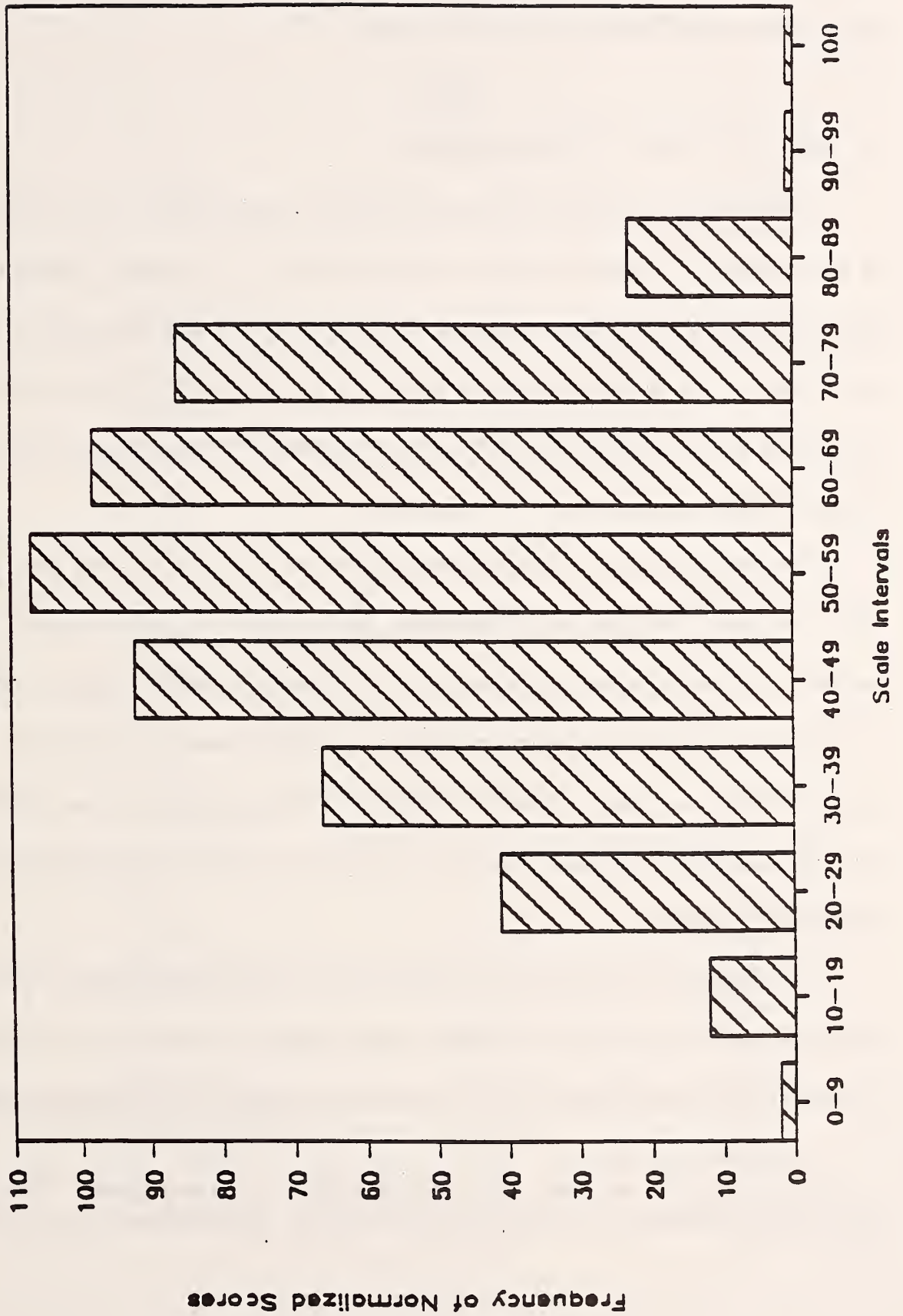
The process involved subtracting the average total score of each panel from the individual proposal total score (to account for differences in the level of the score), and then dividing the difference by the standard deviation of that panel's scores (to account for the disparity in the range of assigned scores). These adjusted scores were then re-scaled from 0 to 100 in order to make them easier to interpret.<sup>2</sup>

The distribution of the proposal scores after adjusting for panel variation is shown in Figure II.1. After adjusting, the scores were clustered over a narrower range than the assigned scores. This was expected since the goal of the adjustment process was to

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<sup>2</sup>Details of this process can be found in Appendix B.

FIGURE II.1  
 Distribution of Applicants' Scores  
 (After Adjustment)



diminish the inter-panel variations. These adjusted scores were used to rank the proposals' technical merit in the selection process.

## B. SELECTING THE FUNDED GRANTS

There were two guidelines for selecting the grant award winners. First, the merit of the proposal (as reflected by the score), and second, an equitable distribution of funds across states with eligible hospitals. In order to meet both of these goals, HCFA developed a two-stage award selection system using a state pool funding mechanism. This system insured that all states with eligible applicants received some grant funds and that the highest quality proposals were funded.

The first step in the award selection process was to develop a state grant pool. The total funds available for disbursement (\$8.3 million for the first year) were distributed across the states in proportion to the estimated number of eligible hospitals in that state relative to the estimated number of eligible hospitals nationwide. The amount of each state pool is listed in Table II.2. The largest state pool was \$811,747 in Texas where nearly 10 percent of eligible hospitals are located, while the smallest was \$14,409 in Maryland.<sup>3</sup>

The second step in the selection process was to rank applicants within each state by their adjusted total score. The highest ranked applicant in each state was awarded a grant even if the grant award exceeded the state limit (based on the applicant's budget

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<sup>3</sup>Four states did not have any hospitals eligible for the program. They are Connecticut, Delaware, New Jersey and Rhode Island. Thus, they were not allocated funds.

TABLE II.2  
GRANT FUNDS AVAILABLE TO STATES

State	Eligible Hospitals	State Pool <sup>a</sup>
Alabama	13	62,442
Alaska	27	129,687
Arkansas	40	192,129
Arizona	20	96,064
California	40	192,129
Colorado	41	196,932
Connecticut	0	0
Delaware	0	0
Florida	19	91,261
Georgia	56	268,981
Hawaii	9	43,229
Iowa	77	369,849
Idaho	35	168,113
Illinois	49	235,358
Indiana	32	153,703
Kansas	96	461,111
Kentucky	41	196,932
Louisiana	45	216,145
Massachusetts	3	14,409
Maryland	3	14,409
Maine	17	81,655
Michigan	47	225,752
Minnesota	92	441,898
Missouri	47	225,752
Mississippi	59	283,391
Montana	44	211,342
North Carolina	38	182,523
North Dakota	37	177,719
Nebraska	69	331,423
New Hampshire	9	43,229

TABLE II.2 (continued)

State	Eligible Hospitals	State Pool <sup>a</sup>
New Jersey	0	0
New Mexico	20	96,064
Nevada	10	48,032
New York	31	148,900
Ohio	28	134,490
Oklahoma	63	302,604
Oregon	24	115,277
Pennsylvania	13	62,442
Puerto Rico	4	19,212
Rhode Island	0	0
South Carolina	15	72,048
South Dakota	42	201,736
Tennessee	29	139,293
Texas	169	811,747
Utah	16	76,851
Virginia	18	86,458
Vermont	10	48,032
Washington	39	87,326
Wisconsin	60	288,194
West Virginia	18	86,458
Wyoming	<u>14</u>	<u>67,245</u>
TOTAL	1,728	\$8,299,976 <sup>b</sup>

<sup>a</sup>Computed as the number of eligible rural hospitals in the state divided by the total number of eligible hospitals in the nation (1,728) multiplied by the available funds (\$8.3 million).

<sup>b</sup>Does not total to \$8.3 million due to rounding.



for the first year of its project). This assured that each state with any applicants would have at least one funded grant. Awards were then made to the next highest ranked applicants until the state pool was exhausted. The pool was never exceeded in states with more than one award. A total of 157 awards totalling over \$6.9 million was made in the state pool process. This process left funds of \$1.2 million uncommitted.

After this initial selection of the grantees based on the state pools, the remaining grant funds were awarded. These funds arose from two sources. First, as indicated above, since the grant awards were for various amounts (depending on the proposal budgets), it was not always possible to make awards within states that fit the state pool amount exactly. Second, since none of the eligible hospitals in Massachusetts applied to the program, the Massachusetts state pool funds were not awarded in the first selection. The combined funds from these two sources were merged into a national pool. Applicants who had not received a grant award under the state pool method were ranked by adjusted score regardless of state. The highest ranked applicants received awards until the pool was exhausted. This final step resulted in 27 further awards. A total of 184 grants were awarded, representing 155 different projects, for a total first-year value of \$8,254,443. The winning hospitals and their first year grant fund amount are listed in Appendix C.

### C. VARIATION IN THE QUALITY OF THE PROPOSALS

The wide range in proposal scores suggests that there was a large variation in the ability of rural hospitals to prepare proposals that analyze and address their problems effectively.

The proposals that scored well on understanding the nature of the primary market area and the problems faced by the hospital tended to present detailed documentation on the changing demographic characteristics of their service areas, the decline in inpatient demand, and the increased use of outpatient services that has been affecting their financial viability. Some of the lower scoring proposals focused on the hospital's financial problems without explaining the causative factors, or failed to explain how their proposed project would address the problems. (For example, one proposal documented the outward migration of young families and the growth of a retirement community, but proposed that the hospital recruit an obstetrician.)

The better written proposals included a detailed description of the proposed project, including the planned use of grant funds, a budget, a management plan, and the expected results. Poorly written proposals described their proposed projects in general terms, without the level of detail necessary to evaluate the potential success or failure of the project. For example, of two proposals to recruit professional staff, the awarded proposal documented specific activities and their costs, such as placing advertisements, travel costs for candidate interviewing, and the like. The proposal that was not funded, just indicated that a substantial portion of the grant was to be given to a consulting firm

to recruit personnel, with no documentation about what the consultant would do for the fee.

Funded proposals presented management plans that were very complete, while non-awarded proposals included plans that were very vague and did not have a timetable, making it difficult to determine if the project could be successfully completed within budget and during the funding period.

Many different approaches were used to document how beneficiary access would be improved. The better proposals provided data documenting access to both hospital and other health services. Low-scoring proposals generally did not use any specific data, and typically addressed the access issue by statements such as "since the program will provide education services, access should improve."

Many proposals did not address the issues of community support or how the project would affect Medicare expenditures. The primary reason that proposals did not address community support was that they did not have a detailed management plan and thus could not show how the community would be involved. The reason for the low scores on the Medicare cost savings issues is that many projects could not demonstrate how Medicare expenditures would be reduced. As many reviewers noted, many of the proposed projects could increase Medicare costs, not decrease them.



### III. DESCRIPTION OF THE ELIGIBLE, APPLICANT, AND GRANTEE HOSPITALS

#### A. GEOGRAPHIC DISTRIBUTION OF THE APPLICANTS AND THE GRANTEE HOSPITALS

The geographic distribution of the hospitals eligible for the Grant Program for Rural Health Care Transition, the number of proposals received, and the number of awards are displayed in Table III.1. Of the states that had eligible rural hospitals, every state (except Massachusetts) had at least one applicant. Texas had the largest number of applications (97); not a surprising result since Texas had the largest number of eligible rural hospitals (167). New Jersey and Rhode Island had no rural hospitals and Connecticut and Delaware had no eligible rural hospitals.

The enthusiasm for the grant program varied widely across the states, as evidenced by the number of applications to the program. While the proportion of eligible hospitals that applied to the Grant Program exceeded 70 percent in Nevada, North Dakota, Maryland, and South Carolina, less than 20 percent of the eligible hospitals in Alaska, Colorado, Hawaii, Indiana and New Mexico applied.

As mentioned in Chapter II, the grantee selection process was designed to insure a distribution of grants across the states based on the number of eligible hospitals within a state. Despite this, we see that the percent of eligible hospitals that received grants within a given state varied from a high of 40 percent in Vermont and Nebraska to a low of 5 percent in Arizona. There are two reasons for this. First, in states where there

TABLE III.1

## GRANT PROGRAM FOR RURAL HEALTH CARE TRANSITION: ELIGIBLE HOSPITALS, PROPOSALS RECEIVED, AND AWARDS

Census Division & State	Number of Eligible Rural Hospitals	% of Eligible Hospitals Nationwide	Number of Proposals Received that Applied	Number of Hospitals Applied that Applied	% Eligible Hospitals that Applied	Number of Awards	% Eligible Hospitals Awarded Grants	Funding Level (\$)	% Total Funding
<b>New England</b>									
Maine	17	0.98	11	10	58.82	1	5.88	50000	0.61
Massachusetts	3	0.17	0	0	0.00	0	0.00	0	0.00
New Hampshire	9	0.52	3	2	22.22	1	11.11	50000	0.61
Vermont	10	0.58	6	6	60.00	4	40.00	43825	0.53
<b>Total</b>	<b>39</b>	<b>2.26</b>	<b>20</b>	<b>18</b>	<b>46.15</b>	<b>6</b>	<b>15.38</b>	<b>143825</b>	<b>1.74</b>
<b>Middle Atlantic</b>									
New York	31	1.79	12	12	38.71	5	16.13	249895	3.03
Pennsylvania	13	0.75	8	8	61.54	2	15.38	100000	1.21
Puerto Rico	4	0.23	2	2	50.00	1	25.00	50000	0.61
<b>Total</b>	<b>48</b>	<b>2.78</b>	<b>22</b>	<b>22</b>	<b>45.83</b>	<b>8</b>	<b>16.67</b>	<b>399895</b>	<b>4.84</b>
<b>South Atlantic</b>									
Florida	19	1.10	10	10	52.63	1	5.26	50000	0.61
Georgia	56	3.24	18	18	32.14	3	5.36	150000	1.82
Maryland	3	0.17	3	3	100.00	1	33.33	50000	0.61
North Carolina	38	2.20	20	14	36.84	4	10.53	188000	2.28
South Carolina	15	0.87	11	11	73.33	1	6.67	50000	0.61
Virginia	18	1.04	12	12	66.67	2	11.11	100000	1.21
West Virginia	18	1.04	9	9	50.00	4	22.22	200000	2.42
<b>Total</b>	<b>167</b>	<b>9.66</b>	<b>83</b>	<b>77</b>	<b>46.11</b>	<b>16</b>	<b>9.58</b>	<b>788000</b>	<b>9.55</b>
<b>East North Central</b>									
Illinois	49	2.84	14	14	28.57	4	8.16	195560	2.37
Indiana	32	1.85	6	6	18.75	3	9.38	143261	1.74
Michigan	47	2.72	30	30	63.83	4	8.51	188400	2.28
Ohio	28	1.62	11	11	39.29	2	7.14	100000	1.21
Wisconsin	60	3.47	20	20	33.33	8	13.33	342488	4.15
<b>Total</b>	<b>216</b>	<b>12.50</b>	<b>81</b>	<b>81</b>	<b>37.50</b>	<b>21</b>	<b>9.72</b>	<b>969709</b>	<b>11.75</b>
<b>East South Central</b>									
Alabama	27	1.56	17	17	62.96	4	14.81	200000	2.42
Kentucky	41	2.37	15	15	36.59	4	9.76	200000	2.42
Mississippi	59	3.41	14	14	23.73	4	6.78	200000	2.42
Tennessee	29	1.68	9	9	31.03	3	10.34	150000	1.82
<b>Total</b>	<b>156</b>	<b>9.03</b>	<b>55</b>	<b>55</b>	<b>35.26</b>	<b>15</b>	<b>9.62</b>	<b>750000</b>	<b>9.09</b>

TABLE III.1 (continued)

Census Division & State	Number of Eligible Rural Hospitals	% of Eligible Hospitals Nationwide	Number of Proposals Received that Applied	Number of Hospitals that Applied	% Eligible Hospitals that Applied	Number of Awards	% Eligible Hospitals Awarded Grants	Funding Level (\$)	% Total Funding
<b>West North Central</b>									
Iowa	77	4.46	19	19	24.68	5	6.49	248319	3.01
Kansas	96	5.56	27	27	28.13	9	9.38	414373	5.02
Minnesota	92	5.32	28	28	30.43	9	9.78	432300	5.24
Missouri	47	2.72	24	24	51.06	4	8.51	199975	2.42
Nebraska	69	3.99	25	21	30.43	6	8.70	240675	2.92
North Dakota	37	2.14	27	27	72.97	5	13.51	246050	2.98
South Dakota	42	2.43	23	19	45.24	14	33.33	194995	2.36
<b>Total</b>	<b>460</b>	<b>26.62</b>	<b>173</b>	<b>165</b>	<b>35.87</b>	<b>52</b>	<b>11.30</b>	<b>1976867</b>	<b>23.95</b>
<b>West South Central</b>									
Arkansas	40	2.31	21	21	52.50	7	17.50	347300	4.21
Louisiana	45	2.60	11	11	24.44	4	8.89	199096	2.41
Oklahoma	63	3.65	18	18	28.57	7	11.11	350000	4.24
Texas	169	9.78	93	89	52.66	14	8.28	689909	8.36
<b>Total</b>	<b>317</b>	<b>18.34</b>	<b>143</b>	<b>139</b>	<b>43.85</b>	<b>32</b>	<b>10.09</b>	<b>1586305</b>	<b>19.22</b>
<b>Mountain</b>									
Arizona	20	1.16	13	13	65.00	1	5.00	50000	0.61
Colorado	41	2.37	7	7	17.07	5	12.20	250000	3.03
Idaho	35	2.03	11	10	28.57	3	8.57	149800	1.81
Montana	44	2.55	28	22	50.00	4	9.09	197935	2.40
Nevada	10	0.58	7	7	70.00	4	40.00	181000	2.19
New Mexico	20	1.16	3	3	15.00	2	10.00	88187	1.07
Utah	16	0.93	5	5	31.25	1	6.25	50000	0.61
Wyoming	14	0.81	8	8	57.14	2	14.29	72900	0.88
<b>Total</b>	<b>200</b>	<b>11.57</b>	<b>82</b>	<b>75</b>	<b>37.50</b>	<b>22</b>	<b>11.00</b>	<b>1039822</b>	<b>12.60</b>
<b>Pacific</b>									
Alaska	13	0.75	1	1	7.69	1	7.69	50000	0.61
California	40	2.31	21	21	52.50	4	10.00	200000	2.42
Hawaii	9	0.52	1	1	11.11	1	11.11	50000	0.61
Oregon	24	1.39	10	10	41.67	3	12.50	150000	1.82
Washington	39	2.26	12	12	30.77	3	7.69	150000	1.82
<b>Total</b>	<b>125</b>	<b>7.23</b>	<b>45</b>	<b>45</b>	<b>36.00</b>	<b>12</b>	<b>9.60</b>	<b>600000</b>	<b>7.27</b>
<b>Total All Divisions</b>	<b>1728</b>	<b>100.00</b>	<b>704</b>	<b>677</b>	<b>39.18</b>	<b>184</b>	<b>10.65</b>	<b>8254443</b>	<b>100.00</b>

NOTE: New Jersey and Rhode Island had no rural hospitals. Connecticut and Delaware had no eligible rural hospitals.

are few eligible hospitals, one grantee is a large percentage of the eligible hospitals. An example of this is the state of Maryland, whose single grantee represents 33 percent of the total eligible hospitals. Second, since the majority of consortium applications contained hospitals that were within the same state, a consortium winner in the state could increase the number of grantees significantly. An example of this can be seen in Vermont, where the four grantees are all members of a single consortium.

## B. COUNTY CHARACTERISTICS

The success of the Grant Program for Rural Health Care Transition will be influenced by the surrounding health care environment. If the area characteristics of the grantees match those of the general rural population, then any success achieved under this program has the potential to be replicated in other rural areas. This makes it important to compare the characteristics of the grantee sites with the rest of the potential project sites. To do this, we have compared four groups of areas in the following sections: (1) all counties that have hospitals that were deemed eligible for the grant program; (2) all counties that have hospitals that applied to the grant program; (3) all counties that have hospitals with funded grants; and (4) all counties that have hospitals with non-funded grants.<sup>1</sup>

### 1. Demographic Characteristics

Table III.2 displays the demographic characteristics for the counties of all eligible hospitals, all grant applicants, and the funded and non-funded applicants. In general,

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<sup>1</sup>See Appendix D for details on data sources.



the characteristics of all four groups are very similar. The median population density is approximately 24 persons per square mile, while the proportion of whites is approximately 89 percent. The percent of the population that is elderly is virtually the same across all four groups, around 14.3 percent. In comparison, the national population density is 68.1 persons per square mile, whites comprise 85 percent of the U.S. population, and the elderly comprise 11.7 percent.<sup>2</sup> Thus, while the characteristics of the program population are somewhat different from the national average, the demographic characteristics of the eligible hospitals, grant applicants, and funded and non-funded grants are equivalent to and mirror the general rural population.

Turning to the areas' economic characteristics, we see that the grant applicants are very similar to the eligible population. The median per capita income in 1986 is just \$177 lower for the grant applicants (\$11,166) than the eligible hospitals (about 1% difference). The percent of the elderly living in poverty is slightly higher, but the median unemployment rate is slightly lower for the grant applicants.

Comparing the area economic characteristics of the funded and non-funded applicants the data again show that the grant winners are from areas that are similar to the non-funded areas. The median per capita personal income is close to \$11,200 for both areas. The percent of the elderly living in poverty and the unemployment rate are slightly lower among the funded grant sites, but the difference for both measures is less than one-half of one percent.

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<sup>2</sup>National data are from the City and County Data Book, 1988.

TABLE III.2  
COUNTY CHARACTERISTICS

	Eligible Hospitals	Grant Applicants	Funded Grants	Non-Funded Grants
<b>DEMOGRAPHICS</b> (median values)				
Population density per square mile <sup>a</sup>	24.6	23.6	24.8	23.4
% of population over age 65 <sup>b</sup>	14.3	14.3	14.4	14.2
<b>ETHNIC COMPOSITION<sup>b</sup></b> (mean values)				
% Blacks	6.8	7.1	6.4	7.3
% American Indians	1.7	1.7	1.6	1.8
% White	89.3	89.0	90.0	88.6
<b>ECONOMIC INDICATORS</b> (median values)				
Annual per capita income <sup>c</sup>	11,343	11,166	11,271	11,161
Unemployment rate <sup>d</sup>	7.6	7.5	7.2	7.6
% of over 65 living in poverty <sup>b</sup>	17.7	18.6	18.4	18.7
<b>HEALTH INDICATORS</b> (median values)				
5 year infant mortality rate <sup>e</sup> (per 1,000)	10.5	10.4	10.3	10.4
Mortality rate <sup>f</sup> (per 1,000)	10.4	10.5	10.4	10.5

<sup>a</sup>1987 population estimates divided by land area in square miles.

<sup>b</sup>1980 Census Data.

<sup>c</sup>1986 per capita data from the 1969-1986 Local Area Personnel Income Tape, U.S. Department of Commerce, Bureau of Economic Analysis.

<sup>d</sup>1987 Bureau of Labor Statistics.

<sup>e</sup>1981-1985, National Center for Health Statistics.

<sup>f</sup>Number of reported deaths in 1985 divided by 1985 population estimates, NCHS.

Indicators of the areas' health characteristics are also similar for the grant applicants and the eligible hospitals, with a five year infant mortality rate of approximately 10.4 per thousand live births. This is slightly lower than the 1984 national rate of 10.8 per thousand live births. In contrast, because of the older population, the population mortality rate is higher in these areas than in the overall U.S. population. The 1985 mortality rate is approximately 10.5 per thousand, while the 1984 national mortality rate is 8.6 per thousand.

## 2. Facility Access

Table III.3 displays indicators of the supply of health care facilities across the four groups of counties. As with the demographic characteristics, these statistics suggest that access to health care facilities is the same across the four types of areas.

The funded counties have slightly more hospital beds per capita and hospitals per square mile than the non-funded counties. However, while there may be slightly better access to health services in the funded counties, the hospital beds per capita in the counties of funded hospitals is still short of the national average of 5.4 per 1,000.

Perhaps because of the greater number of beds per capita, the number of inpatient days per person over 65 years is 1.1 days higher per year among areas of the grantee hospitals than among the areas of the non-funded applicants (5.3 days/person vs. 4.2 days/person in 1987; not shown in table). Furthermore, the counties with the funded grants had a median of 5.4 Medicare outpatient visits per year per person over age 65 in 1987, while the non-funded grant areas had a median of 5 Medicare outpatient visits.

TABLE III.3  
COUNTY SUPPLY OF HEALTH FACILITIES  
(Median Values)

	Eligible Hospitals	Grant Applicants	Funded Grants	Non-Funded Grants
Number of hospital beds per 1,000 <sup>a</sup>	4.5	4.4	4.9	4.4
Number of skilled nursing beds per 1,000 <sup>b</sup>	0	.04	0	.1
Number of hospitals per 1,000 square miles <sup>a, c</sup>	1.93	1.81	1.92	1.80
Number of long-term hospitals per 1,000 square miles <sup>b, c</sup>	0	0	0	0

NOTE: Any number less than .0001 is recorded as zero.

<sup>a</sup>From 1987 County Hospital file; Population Estimate (1987) from U.S. Bureau of Census.

<sup>b</sup>From the 1986 Inventory of Long-Term Care Places obtained from National Center for Health Statistics file; Population Estimate (1986) from U.S. Bureau of Census.

<sup>c</sup>Data on land area from City and County Data Book, 1983.

These data suggest that utilization of Medicare hospital services was slightly greater in the grantee areas, implying that there was slightly better access to care in these areas than in the eligible rural population at least until 1987.

### 3. Access to Health Professionals

Although access to health care facilities is an important issue in rural health care, having a health care facility does not always imply that there is access to health care professionals. Table III.4 shows the distribution of the primary care Health Manpower Shortage Areas (HMSAs) in the four types of areas for 1986. The table shows that about half of the counties which included eligible hospitals qualified either partially or wholly as a HMSA, and a similar distribution is found among all of the applicant hospital counties. The counties with funded grants are more likely to be whole county or partial primary care HMSA counties, suggesting that there is a greater unmet need for health care personnel in these counties.

Similarly, Table III.5 shows that the distribution of counties that had a National Health Service Corps (NHSC) site in 1986 was basically the same for counties with eligible hospitals and grant applicants. However, counties with funded grant sites have slightly higher percentages of staffed NHSC sites, as well as active and inactive NHSC sites. This indicates that these counties have a very high need for health professionals.

TABLE III.4

PERCENTAGE OF HOSPITALS LOCATED IN COUNTIES  
DESIGNATED AS PRIMARY CARE HMSAs, 1986

	Eligible Hospitals	Grant Applicants	Funded Grants	Non-Funded Grants
Percent of Hospitals without HMSA designation	50.6%	49.2%	42.0%	51.8%
Percent of Hospitals in counties with partial or whole county HMSA designation	49.4%	50.8%	58.0%	48.2%

SOURCE: Area Resource File.

TABLE III.5

PERCENTAGE OF HOSPITALS LOCATED IN COUNTIES WITH A NATIONAL HEALTH  
SERVICE CORPS SITE IN 1986

Type of NHSC Site	Eligible Hospitals	Grant Applicants	Funded Grants	Non-Funded Grants
Staffed NHSC sites	46.9%	47.1%	50.8%	45.7%
Federal active NHSC site	13.4%	14.2%	16.0%	13.6%
Federal inactive NHSC site	24.8%	26.1%	28.7%	25.1%

SOURCE: 1986 National Health Service Corps Site Tape.

NOTE: Active NHSC Sites -- Sites on the High Priority Opportunity list.  
Persons with NHSC obligations may only choose these sites.

Inactive NHSC Sites -- Sites not on the High Priority Opportunity List.  
Only non-obligated NHSC members may choose these sites.

However, there was little difference in the median number of physicians in 1985 and 1986 across the four groups of counties (Table III.6). The median number of physicians per capita was about 6.1 per 10,000 population in all areas, and the absolute numbers of physicians older than 65 years and younger than 35 are also similar, suggesting that the percent who are likely to retire in the near future is about the same. While there is little difference in the number of physicians per capita across these rural areas, the median number of 6 per 10,000 is much smaller than the national average of 48.4 physicians per 10,000.

#### 4. Summary of Area Characteristics

In summary, it appears that the hospitals that applied to the grant program are located in areas that generally have characteristics very similar to the areas of all eligible rural hospitals, and that the funded grant sites are very similar to the overall eligible rural population. These rural areas are, however, markedly different from the average U.S. county.



TABLE III.6  
COUNTY SUPPLY OF HEALTH PROFESSIONALS  
(Median Values)

	Eligible Hospitals	Grant Applicants	Funded Grants	Non-Funded Grants
<b>PHYSICIANS</b>				
Number of Active, Non-Federal MDs per 10,000 population (1986) <sup>a,c</sup>	6.1	6.1	6.2	6.1
Total number of Active, Non-Federal MDs, (1986) <sup>a</sup>	10	10	11	10
Total number of MDs (including Federal and Non-Active) over age 65 (1985) <sup>b</sup>	3	3	3	3
Total number of MDs (including Federal and Non-Active) under age 35 (1985) <sup>b</sup>	2	2	2	2

<sup>a</sup>AMA Distributions of Physicians.

<sup>b</sup>AMA Masterfile.

<sup>c</sup>Census Data.



## IV. DESCRIPTION OF THE PROJECTS

### A. TYPES OF PROPOSALS RECEIVED

One of the innovative aspects of the transition grant legislation is that the ideas for the types of projects to be undertaken come from the rural hospitals themselves. Thus, this solicitation offers a unique opportunity to examine what the rural hospitals believe will enhance their ability to provide services and remain financially viable.<sup>1</sup>

Table IV.1 shows the distribution of the types of objectives described in the 529 projects proposed, as well as a distribution by consortium and individual hospital. Overall, staff development and outpatient service projects were the most frequently cited objectives. Comparing the consortium proposals with those submitted by individual hospitals, we find that the consortia were much more likely to propose projects that involved strategic planning, and far less likely to propose projects that developed outpatient services.

Tables IV.2 to IV.7 describe the types of proposals in more detail within each major objective category. For example, Table IV.2 describes the types of proposals intended to develop beneficiary services. Some interesting points seen in these tables are as follows:

- o The most frequently cited proposal objective was the development of nursing staff (94 proposals), while the next highest was the development of primary care physician staff (92 proposals).

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<sup>1</sup>A compilation of privately funded projects has been done on a smaller scale. See the report by Cochran and Erickson, 1989.

TABLE IV.1

RURAL HEALTH CARE TRANSITION GRANTS  
PROPOSAL OBJECTIVES

	Beneficiary Services	Strategic Planning	Staff Development	Inpatient Services	Outpatient Services	Long-Term/ Home Health Care
All Proposals (N = 529)	184 (35%)	186 (35%)	211 (40%)	58 (11%)	212 (40%)	96 (18%)
Individual Hospitals (N = 470)	168 (36%)	143 (30%)	186 (40%)	53 (11%)	202 (43%)	88 (19%)
Consortium (N = 59)	16 (27%)	43 (73%)	25 (42%)	5 (8%)	10 (17%)	8 (14%)

NOTE: A total of 704 hospitals applied for grants; 470 individual hospitals, and 59 consortia, representing 234 hospitals. The 470 individual hospitals plus the 59 consortia represents the total number of proposal (529). Each proposal, however, can have multiple objectives, and thus the number of proposal objectives is greater than the number of proposals. Thus, the percentages will add to more than 100 percent.

TABLE IV.2

RURAL HEALTH CARE TRANSITION GRANTS  
PROPOSALS THAT ADDRESS BENEFICIARY SERVICES AND ACCESS

Proposal Goal: To Develop	Number of Proposals <sup>a</sup>	Percent of All Proposals <sup>b</sup>	Number of Funded Proposals <sup>c</sup>	Percent of Awarded Proposals In This Category <sup>d</sup>
Service Coordination, Benefit Counselling, Senior Center, and Eldercare Programs	57	10.8%	17	29.8%
Senior Wellness, Health Promotion, Screening, Risk Assessment, Health Information, Patient Education and Prevention	90	17.1%	21	23.3%
Care and Case Management Services, Discharge Planning and Counselling	33	6.2%	9	27.3%
Transportation Services, Mobile Medical Services and Outreach Programs	70	13.2%	30	42.9%
Library of Health Information	2	0.4%	0	0.0%
Any of the Above Proposal Goals	184	34.8%	56	30.4%

NOTE: Because any applicant may develop a proposal with more than one objective within a given grant category, the number of proposals may add to more than the total.

<sup>a</sup>Total number of proposals with this objective.

<sup>b</sup>Number of proposals with this objective divided by the total number of proposals (529).

<sup>c</sup>Number of funded proposals with this objective.

<sup>d</sup>Number of funded proposals with this objective divided by the total number of received proposals with this objective.

TABLE IV.3

RURAL HEALTH CARE TRANSITION GRANTS  
 PROPOSALS THAT ADDRESS STRATEGIC PLANNING, MANAGEMENT  
 PROBLEMS AND ADMINISTRATIVE SYSTEMS

Proposal Goal: To Develop	Number of Proposals <sup>a</sup>	Percent of All Proposals <sup>b</sup>	Number of Funded Proposals <sup>c</sup>	Percent of Awarded Proposals In This Category <sup>d</sup>
Strategic Planning - Single Hospital (includes needs assessment)	88	16.6%	22	25.0%
Strategic Planning - Multiple Hospitals (includes consolidation, shared services, health network development and HMO development)	69	13.0%	16	23.2%
Automated Systems and Applications	36	6.8%	8	22.2%
Management Services, Consulting Services and Staff Development	40	7.6%	7	17.5%
Any of the Above Proposal Goals	186	35.2%	47	25.3%

NOTE: Because any applicant may develop a proposal with more than one objective within a given grant category, the number of proposals may add to more than the total.

<sup>a</sup>Total number of proposals with this objective.

<sup>b</sup>Number of proposals with this objective divided by the total number of proposals (529).

<sup>c</sup>Number of funded proposals with this objective.

<sup>d</sup>Number of funded proposals with this objective divided by the total number of received proposals with this objective.

TABLE IV.4

RURAL HEALTH CARE TRANSITION GRANTS  
 PROPOSALS THAT ADDRESS MEDICAL STAFF DEVELOPMENT,  
 RECRUITMENT, RETENTION AND EDUCATION

Proposal Goal: To Develop	Number of Proposals <sup>a</sup>	Percent of All Proposals <sup>b</sup>	Number of Funded Proposals <sup>c</sup>	Percent of Awarded Proposals <sup>d</sup> In This Category
Primary Care Physicians	92	17.4%	27	29.4%
Specialists	61	11.5%	14	23.0%
Nurses, Nurse Practitioners and LPNs	94	17.8%	28	29.8%
Allied Health Professionals (including MSWs, occupational therapists, pharmacists, physical therapists and physician assistants)	62	11.7%	20	32.3%
Any of the Above Proposal Goals	211	39.9%	59	28.0%

NOTE: Because any applicant may develop a proposal with more than one objective within a given grant category, the number of proposals may add to more than the total.

<sup>a</sup>Total number of proposals with this objective.

<sup>b</sup>Number of proposals with this objective divided by the total number of proposals (529).

<sup>c</sup>Number of funded proposals with this objective.

<sup>d</sup>Number of funded proposals with this objective divided by the total number of received proposals with this objective.

TABLE IV.5

RURAL HEALTH CARE TRANSITION GRANTS  
PROPOSALS THAT ADDRESS INPATIENT SERVICE DEVELOPMENT

Proposal Goal: To Develop	Number of Proposals <sup>a</sup>	Percent of All Proposals <sup>b</sup>	Number of Funded Proposals <sup>c</sup>	Percent of Awarded Proposals In This Category
RadioLOGY Services (includes nuclear medicine, and other imaging technology)	6	1.1%	2	33.3%
Laboratory Facilities	11	2.1%	1	9.1%
Mental Health Services (includes substance abuse, dementia and psychiatric beds)	13	2.5%	6	46.2%
Intensive Care Units/Heart Facilities	5	1.0%	1	20.0%
Surgical Services	9	1.7%	1	11.1%
Physical Therapy Services	16	3.0%	1	6.3%
Geriatric Services	4	0.8%	1	25.0%
Any of the Above Proposal Goals	58	11.0%	13	22.4%

NOTE: Because any applicant may develop a proposal with more than one objective within a given grant category, the number of proposals may add to more than the total.

<sup>a</sup>Total number of proposals with this objective.

<sup>b</sup>Number of proposals with this objective divided by the total number of proposals (529).

<sup>c</sup>Number of funded proposals with this objective.

<sup>d</sup>Number of funded proposals with this objective divided by the total number of received proposals with this objective.



TABLE IV.6

RURAL HEALTH CARE TRANSITION GRANTS  
PROPOSALS THAT ADDRESS OUTPATIENT/AMBULATORY SERVICE  
DEVELOPMENT AND CONVERSION

Proposal Goal: To Develop	Number of Proposals <sup>a</sup>	Percent of All Proposals <sup>b</sup>	Number of Funded Proposals <sup>c</sup>	Percent of Awarded Proposals <sup>d</sup> In This Category
General Outpatient Services	45	8.5%	13	28.9%
Emergency Room Services/Facilities	34	6.4%	13	38.2%
Ambulance/Paramedic Services	11	2.1%	5	45.5%
Clinic Services (including specialty clinics)	44	8.3%	18	40.9%
Outpatient Surgery/Specialty Services (including eye surgery, chemotherapy, laboratory, ob/gyn and radiology services)	37	7.0%	13	35.1%
Outpatient Mental Health (includes substance abuse)	7	1.3%	5	71.4%
Outpatient Rehabilitative Services (includes general, physical therapy, and specialty (e.g., cardiac))	36	6.8%	8	22.2%
Lifeline/911 System - Installation or Expansion	29	5.5%	13	44.8%
Occupational Health Services	3	0.6%	0	0.0%
Any of the Above Proposal Goals	212	40.1%	40	42.0%

NOTE: Because any applicant may develop a proposal with more than one objective within a given grant category, the number of proposals may add to more than the total.

<sup>a</sup>Total number of proposals with this objective.

<sup>b</sup>Number of proposals with this objective divided by the total number of proposals (529).

<sup>c</sup>Number of funded proposals with this objective.

<sup>d</sup>Number of funded proposals with this objective divided by the total number of received proposals with this objective.

TABLE IV.7

RURAL HEALTH CARE TRANSITION GRANTS  
PROPOSALS THAT ADDRESS LONG TERM CARE, HOME HEALTH  
AND RELATED SERVICES

Proposal Goal: To Develop	Number of Proposals <sup>a</sup>	Percent of All Proposals <sup>b</sup>	Number of Funded Proposals <sup>c</sup>	Percent of Awarded Proposals In This Category <sup>d</sup>
Inpatient Long-Term Care (includes conversion to Long-Term Care Facility and Increasing Swing Beds)	33	6.2%	15	45.5%
Respite Care/Adult Day Care	26	4.9%	14	53.9%
Hospice Services	9	1.7%	4	44.4%
Home Health Services (including Meal Delivery)	44	8.3%	15	34.1%
Supervised Living Facility for Elderly	13	2.5%	4	30.1%
Inpatient Rehabilitation Services	3	0.6%	1	33.3%
Any of the Above Proposal Goals	96	18.2%	40	41.7%

NOTE: Because any applicant may develop a proposal with more than one objective within a given grant category, the number of proposals may add to more than the total.

<sup>a</sup>Total number of proposals with this objective.

<sup>b</sup>Number of proposals with this objective divided by the total number of proposals (529).

<sup>c</sup>Number of funded proposals with this objective.

<sup>d</sup>Number of funded proposals with this objective divided by the total number of received proposals with this objective.

- o There were more proposals to develop outpatient rehabilitative services (36) than inpatient rehabilitative services (16), but there were more proposals to develop inpatient mental health facilities (13) than outpatient facilities (7).
- o There were 90 proposals that planned to develop some type of senior wellness/health education service.

## B. TYPES OF PROJECTS FUNDED

Of the 529 projects proposed, 155 were funded under the Grant Program for Rural Health Care Transition. These 155 proposals included 144 individual hospital proposals, and 11 consortia proposals. The 11 funded consortia proposals include 40 hospitals, which accounts for the 184 awards.

Table IV.8 compares the broad objectives of the winning proposals with those of the proposals that were not awarded grants. Overall, 29 percent of proposals were funded. A greater proportion of awards were made for long term/home health care service projects (42 percent of the proposals with this goal received a grant award) and outpatient service projects (35 percent of proposals with this goal received a grant award). In contrast, proposals whose goal was inpatient service development received a significantly lower number of awards (22 percent).

We present more detailed objectives of the winning proposals in Tables IV.2 through IV.7. Looking at the more detailed objectives, we find that the largest of number of funded proposals were: transportation (30 awards), recruitment/staff development (nurses, 28 projects, and primary care physicians,

TABLE IV.8

RURAL HEALTH CARE TRANSITION GRANTS  
PROPOSAL OBJECTIVES FOR GRANTEEES AND NON-GRANTEEES

	Beneficiary Services	Strategic Planning	Staff Development	Inpatient Services	Outpatient Services	Long-Term/ Home Health Care
Grantees (N = 155)	56	47	59	13	74	40
Percent of Proposals with this Goal	30%	25%	28%	22%	35%	42%
Non-Funded Proposals (N = 374)	128	139	152	45	138	56
Percent of Proposals with this Goal	70%	75%	72%	78%	65%	58%
Total Proposals	184	186	211	58	212	96

NOTE: Row percentages will add to more than 100% because projects can have multiple objectives. Percent of proposals that were selected overall: 29%.

27 projects), single hospital strategic planning (22 projects), and senior wellness programs (21 awards). However, relative to the number of applicants with a given objective, a greater proportion of awards were made to projects with the following objectives:

- o Outpatient mental health
- o Respite Care/Adult Day Care
- o Inpatient mental health services
- o Inpatient long term care services
- o Ambulance/Paramedic services
- o Lifeline/911 system
- o Hospice services
- o Transportation services
- o Clinic services

It is interesting to note that proposals to develop mental health service projects were viewed favorably by the panelists. Seventy percent of the proposals to develop outpatient mental health services were funded. In addition, inpatient mental health services was the only inpatient service that received a relatively high number of awards; almost half of the awards for inpatient services were for mental health.

Among the long-term care proposals, developing inpatient long-term care facilities, respite/adult day care services and hospice services were funded relatively highly. The conversion to long term/swing beds fulfills two purposes: it provides a service which is

generally limited in rural areas, and decreases the excess supply of hospital beds. Thus, it is not surprising that these proposals received favorable reviews.

In contrast, fewer than ten percent of the proposals that developed laboratory services or inpatient physical therapy services were selected, and just one out of nine projects to develop inpatient surgical services was awarded a grant. Since there may be economies of scale in the provision of laboratory services and surgery, it may be inefficient to provide these services in rural areas. Thus, it is not surprising that these proposals were not selected for funding.

The regional distribution of proposed projects was examined to determine if different areas of the country were inclined to propose different types of projects. However, we found that the types of projects proposed were evenly distributed across the country, with no one area likely to propose any particular type of project. This suggests that the types of problems rural hospitals face, and the solutions they foresee, are distributed widely throughout the country.

## C. FUNDING AMOUNTS

### 1. Federal Funding

Table IV.9 shows the distribution of the funding amounts requested by all of the applicants for the two-year period.<sup>2</sup> The majority of the applicants requested the maximum amount of the grant (\$100,000). There were 30 applicants that requested

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<sup>2</sup>In this figure, each consortium applicant is counted separately, with its portion of the consortium allocation counted as its award amount.

TABLE IV.9  
 DISTRIBUTION OF REQUESTED GRANT FUNDS  
 PER APPLICANT

Level of Funding Requested	Number of Applicants	Percent of Applicants
\$0 - \$25,000	30	4.3
\$25,001 - \$50,000	80	11.4
\$50,001 - \$75,000	34	4.8
\$75,001 - \$99,999	142	20.2
\$100,000	403	57.2
Over \$100,000	15	2.2

TABLE IV.10

DISTRIBUTION OF THE AMOUNT OF FEDERAL FUNDING  
REQUESTED BY CONSORTIA PROPOSALS

Amount Requested by the Consortia in Total	Number of Consortia
Less than \$100,000	6
\$100,000 - \$199,999	10
\$200,000 - \$299,999	20
\$300,000 - \$399,999	8
\$400,000 - \$499,999	8
Over \$500,000	7
Total	59



less than \$25,000 in federal funds, while 15 requested more than the maximum allowed.

Table IV.10 shows the distribution of the total amount requested by the 59 consortia. Since the largest consortium included 15 hospitals, the maximum amount that could have been requested was \$1.5 million, but the actual maximum requested was \$800,000. Twenty of the consortia requests were between \$200,000 and \$300,000, corresponding to the large number of consortia that consist of 2 and 3 hospitals.

## 2. External Support

Another interesting feature of the Grant Program for Rural Health Care Transition is that hospitals were encouraged to seek outside funding to supplement grant funds. The sources and amounts of financial support that hospitals proposed varied greatly across proposals, with many hospitals claiming as outside funding the service revenues they expected to receive as a result of implementing the project. Many proposals also included "in-kind" contributions, which is difficult to evaluate. The broad definition of external funding, the various methods used by hospitals to quantify "in-kind" support, and the softness of the funding commitment makes the data provided by hospitals on external funding prone to measurement error so that it should be interpreted cautiously.

Among the traditional means of external support, fund-raising activities were the most common type. Proposals mentioned either prior, current, planned, or potential community involvement in fund raising projects. Regarding prior forms of tangible support, some proposals mentioned specific donations already raised by community fund

drives, and medical goods, such as eye glasses, received through local organizations' collection efforts. Other examples are an industrial development corporation that donated over \$100,000, and an anonymous gift of \$8,000 donated to a hospital in Kansas. Equipment and motor vehicle donations were also mentioned as tangible sources of support. One unique factor cited was a one-quarter cent sales tax passed by a community to support the hospital's operations.

Future monetary pledges for the hospital were also mentioned. A hospital in Iowa claimed that a study by the Campaign Consultants of America indicated that the community could raise one million dollars to support the hospital's program.

In addition to fund raising, hospitals cited pledged volunteer hours as external support. One hospital documented the potential roles and needed hours for area residents with various skills and interests. Another proposal discussed pledged hours from the area's medical community, and another from the state health department. In some instances, the hospitals translated these volunteer hours into a dollar value by using an implicit wage rate for volunteers' service, while in other instances they didn't document the value of volunteer time.

Of the 704 applications, 148 did not document any external financial support for their projects. In contrast, 17 applicants submitted budgets that each included over 1 million dollars of external support, with the highest applicant including 4.5 million dollars of external funding. The median level of support was \$32,454 and this was typically spread evenly over the two years of the project.

Comparing the consortia applicants with the individual hospital applicants, the data show that on a per hospital basis, the individual hospitals had higher levels of external support than the consortium members did. The median amount of external financial support per applicant for the consortium hospitals was \$8,928, whereas for individual hospitals it was \$51,857. Sixty-two of the 470 individual hospital applicants (13 percent) submitted applications without any outside support, while 86 of the 234 consortium hospitals (36 percent) submitted applications without external support.

Table IV.11 compares the external support cited by the funded and non-funded projects. The median value of external support among the funded projects was \$50,625, while the median value for the non-funded projects was \$27,915. Only 10 percent of the funded projects had no external support promised, in contrast to 25 percent of the non-funded projects. This suggests that the presence and extent of external support increased the likelihood that the proposed project would receive federal funds (as indeed the scoring criteria provided to panelists intended).

#### D. LOCAL AREA COOPERATION

In addition to financial support, hospitals were expected to discuss cooperative relationships they had already established and planned to establish with local agencies. Potential sources of program support included local and regional health care providers, community and government (local, state, and federal) leaders, schools, merchants, and other civic organizations. Proposals were to include evidence documenting such table cooperative efforts. Applicants were also expected to justify how pledged or given

TABLE IV.11

## EXTERNAL SUPPORT OF FUNDED AND NON-FUNDED PROJECTS

	Funded Proposals	Non-Funded Proposals
Median Value of External Support	\$50,625	\$27,915
Maximum Value of External Support	\$3,091,000	\$4,500,000
Number of Applicants with No External Funding Support	19	129
Number of Projects	155	374

support was integral to the success of their proposed programs. This section provides a qualitative and illustrative discussion of the types of cooperation described by grantees.<sup>3</sup>

Applicants were explicitly instructed to discuss the following as intangible coordination efforts: "Efforts contributed by local or regional health care providers, the community, government, or other programs that may be integral to the successful operation of the project." Based on an examination of the proposals, this statement was interpreted very broadly, and we found that coordination efforts were demonstrated in four different ways. One method was to document reciprocal arrangements in which services would be provided to and received from area health and education organizations. The second method of demonstrating coordination was to show that intangible support from the community and area health care providers existed. Third, applicants illustrated coordination by describing the services they would provide to other area organizations. Fourth, some applicants discussed intra-hospital coordination among Boards of Directors, Administrators, and medical staff. There were also a few hospitals which did not address area coordination.

The reciprocal agreement approach to coordination involved demonstrating that the proposed programs would provide services to other area care givers, as well as

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<sup>3</sup>The discussion draws examples from 20 applications randomly selected from each of the four quartiles of scores for coordination. The first quartile contained applicants with scores ranging between 0 and 9.5, the second with scores between 10 and 12, the third with scores between 12.5 and 15.5, and the fourth quartile with scores between 16 and 20. Within each quartile, there was significant variation in the type, source, and amount/degree of support, as well as diversity in the type and extent of documented evidence for the tangible support and/or coordination.

receive services from these organizations. For example, two proposals stated that local senior citizen centers and state departments of health promised to help the hospitals recruit and retain medical staff, and agreed to provide meals and transportation to elderly patients discharged from the hospital.

The second approach to demonstrating coordination, showing support for the program from sources outside the hospital, was the most common. Letters of support/goodwill were the most prevalent form of evidence. Several hospitals included "stacks" of letters from area merchants unaffiliated with the provision of health care. These letters typically endorsed the proposed programs without offering any type of assistance. Almost all hospitals had at least one letter of program endorsement, ranging from a single letter from a policeman or nursing home operator, to many letters from local and state officials, heads of community advisory groups, and area health care practitioners.

A few applicants focused their discussion of coordination on those whom they believed would benefit from the program, but did not give any indication that they had contacted these groups. For example, a hospital that proposed to open a new laboratory and library focused its coordination section on providing access for nursing home patients to the hospital laboratory for blood tests, and on providing access for university nursing students to the hospital library. However, there was no indication that these potential beneficiaries were aware of the program.

Finally, some applicants focused on coordination within the hospital. Hospitals cited their good relationships between their hospital administration and medical staff

and accomplishments already achieved as evidence of strong internal coordination. In the same vein, some consortia proposals discussed the logistics of program planning among the involved hospitals.

One of the most glaring problems with the pledges of coordination was that few hospitals provided evidence for the support. Applicants claimed that they had external financial contributions, pledged volunteer hours and pledged equipment donations, but they did not often include letters or supporting documentation from these sources. Many hospitals provided numerous letters of local support that encouraged HCFA to award a grant to the applicant but did not offer any concrete support. The letters simply stated how important the program would be for the community.





## V. MONITORING PROCESS AND FUTURE REPORTS

The Omnibus Budget Reconciliation Act of 1987 stipulates that the HCFA Administrator shall report on the status and functioning of the grant program once every six months. In addition, it deems that hospitals that receive grants under this program must provide information for the evaluation and for grant expenditure monitoring. This section describes the process that is designed to serve both monitoring and evaluation purposes.

### A. MONITORING PROCESS

The monitoring process will encompass two separate operations. First, all grantee hospitals will be required to submit reports every six months that their project is in progress. Second, visits will be planned to 50 selected grant sites during the course of their projects. These two operations will provide a large portion of the information required for monitoring the progress and expenditures of the grantees. Additional information will be collected through ongoing discussions between the grant sites and HCFA staff on various implementation and policy issues.

#### 1. Hospital Reports

Hospitals will be required to submit interim reports every six months during the course of their project. To reduce the burden on the hospital the reporting system will be simple and will use existing data where possible. These reports will have two distinct parts. The first will be for budget monitoring. In this part, the hospitals will be

required to report their grant fund expenses and provide documentation (such as sales receipts) for major expenditures. The second part of the interim report will be for project monitoring. In this part, hospitals will be required to report on the progress of their projects, the problems encountered in implementing the project, and the proposed solutions to these problems. In addition, information will be requested on the hospital's overall progress, including issues such as service provision and hospital financial status.

The information from these interim reports will be the basis for the semi-annual reports to Congress.

## 2. Site visits

Over the course of the projects, visits will be made to selected grant sites. In part, site visits will be selected by information obtained from progress reports. During these site visits, information will be collected for both monitoring purposes and for the evaluation. The monitoring process will document the projects' progress compared to the plans submitted in the proposal. For the evaluation, in depth information will be collected on service provision and hospital financial status, as well as on the projects' results.

## B. FUTURE REPORTS

As noted earlier, this is the first report on the Rural Health Care Transition Grant Program. The next report will cover the start-up of the program, examining which projects had difficulties getting underway and which had smooth starts. Also described will be the nature of the problems faced by hospitals in the demonstration. The

subsequent reports will cover the progress of the grantees, examining the problems encountered and how they were resolved. The final report will be an evaluation of the program, documenting which of the projects were successful and why. A guide for rural hospitals will be developed that puts the findings in practical terms.

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APPENDIX A

THE LEGISLATION  
MANDATING THE GRANT PROGRAM  
FOR RURAL HEALTH CARE TRANSITION

Omnibus Budget Reconciliation Act of 1987  
Public Law 100-203; Section 4005(e)

53

(A) *IN GENERAL.*—The Secretary of Health and Human Services shall provide for a study of the criteria used for the classification of hospitals as rural referral centers under section 1886(d)(5)(C)(i) of the Social Security Act. The study shall include an examination of—

(i) the extent that hospitals classified as rural referral centers receive more or less than their actual costs of providing inpatient hospital services, and

(ii) the appropriateness of providing for payment for such centers at a rate other than the rate for a hospital located in an other urban area.

(B) *REPORT.*—The Secretary shall report to Congress, by not later than March 1, 1989, on the study conducted under subparagraph (A) and on recommendations for the criteria that should be applied under section 1886(d)(5)(C)(i) of the Social Security Act for the classification of hospitals as rural referral centers for cost reporting periods beginning on or after October 1, 1989.

(e) *GRANT PROGRAM FOR RURAL HEALTH CARE TRANSITION.*—

(1) The Administrator of the Health Care Financing Administration, in consultation with the Assistant Secretary for Health (or a designee), shall establish a program of grants to assist eligible small rural hospitals and their communities in the planning and implementation of projects to modify the type and extent of services such hospitals provide in order to adjust for one or more of the following factors:

(A) Changes in clinical practice patterns.

(B) Changes in service populations.

(C) Declining demand for acute-care inpatient hospital capacity.

(D) Declining ability to provide appropriate staffing for inpatient hospitals.

(E) Increasing demand for ambulatory and emergency services.

(F) Increasing demand for appropriate integration of community health services.

(G) The need for adequate access (including appropriate transportation) to emergency care and inpatient care in areas in which a significant number of underutilized hospital beds are being eliminated.

(H) The Administrator shall submit a final report on the program to the Congress not later than 180 days after all projects receiving a grant under the program are completed.

Each demonstration project under this subsection shall demonstrate methods of strengthening the financial and managerial capability of the hospital involved to provide necessary services. Such methods may include programs of cooperation with other health care providers, of diversification in services furnished (including the provision of home health services), of physician recruitment, and of improved management systems.

(2) For purposes of this subsection, the term "eligible small rural hospital" means any non-Federal, short-term general acute care hospital that—

Sec. 4005

(A) is located in a rural area (as determined in accordance with subsection (d)),

(B) has less than 100 beds, and

(C) is not for profit.

(3)(A) Any eligible small rural hospital that desires to modify the type or extent of health care services that it provides in order to adjust for one or more of the factors specified in paragraph (1) may submit an application to the Governor of the State in which it is located. The application shall specify the nature of the project proposed by the hospital, the data and information on which the project is based, and a timetable (of not more than 24 months) for completion of the project. The application shall be submitted on or before a date specified by the Administrator and shall be in such form as the Administrator may require.

(B) The Governor shall transmit any application submitted pursuant to subparagraph (A) to the Secretary not later than 30 days after it is received by the Governor, accompanied by any comments with respect to the application that the Governor deems appropriate.

(C) The Governor of a State may designate an appropriate State agency to receive and comment on applications submitted under subparagraph (A).

(4) A hospital shall be considered to be located in a rural area for purposes of this subsection if it is treated as being located in a rural area for purposes of section 1886(d)(3)(D) of the Social Security Act.

(5) In determining which hospitals making application under paragraph (3) will receive grants under this subsection, the Administrator shall take into account—

(A) any comments received under paragraph (3)(B) with respect to a proposed project;

(B) the effect that the project will have on—

(i) reducing expenditures from the Federal Hospital Insurance Trust Fund,

(ii) improving the access of medicare beneficiaries to health care of a reasonable quality;

(C) the extent to which the proposal of the hospital, using appropriate data, demonstrates an understanding of—

(i) the primary market or service area of the hospital, and

(ii) the health care needs of the elderly and disabled that are not currently being met by providers in such market or area, and

(D) the degree of coordination that may be expected between the proposed project and—

(i) other local or regional health care providers, and

(ii) community and government leaders,

as evidenced by the availability of support for the project (in cash or in kind) and other relevant factors.

(6) A grant to a hospital under this subsection may not exceed \$50,000 a year and may not exceed a term of 2 years.

(7)(A) Except as provided in subparagraphs (D) and (C), a hospital receiving a grant under this subsection may use the grant

for any of expenses incurred in planning and implementing the project with respect to which the grant is made.

(B) A hospital receiving a grant under this subsection for a project may not use the grant to retire debt incurred with respect to any capital expenditure made prior to the date on which the project is initiated.

(C) Not more than one-third of any grant made under this subsection may be expended for capital-related costs (as defined by the Secretary for purposes of section 1886(a)(4) of the Social Security Act) of the project.

(8)(A) A hospital receiving a grant under this section shall furnish the Administrator with such information as the Administrator may require to evaluate the project with respect to which the grant is made and to ensure that the grant is expended for the purposes for which it was made.

(B) The Administrator shall report to the Congress at least once every 6 months on the program of grants established under this subsection. The report shall assess the functioning and status of the program, shall evaluate the progress made toward achieving the purposes of the program, and shall include any recommendations the Secretary may deem appropriate with respect to the program. In preparing the report, the Secretary shall solicit and include the comments and recommendations of private and public entities with an interest in rural health care.

(C) The Administrator shall submit a final report on the program to the Congress not later than 180 days after all projects receiving a grant under the program are completed.

(9) For purposes of carrying out the program of grants under this subsection, there are authorized to be appropriated from the Federal Hospital Insurance Trust Fund \$15,000,000 for each of the fiscal years 1989 and 1990.

#### SEC. 1006. PAYMENTS FOR HOSPITAL CAPITAL

(a) REDUCTIONS IN PAYMENTS FOR CAPITAL.—Section 1886(g)(1)(A) of the Social Security Act (42 U.S.C. 1395ww(g)(1)(A)) is amended—

(A) in clause (ii), by striking “, and” and inserting “on or after October 1, 1987, and before January 1, 1988.”

(B) by striking clause (iii) and inserting the following:

“(iii) 12 percent for payments attributable to portions of cost reporting periods or discharges (as the case may be) in fiscal year 1988, occurring on or after January 1, 1988, and

“(iv) 15 percent to portions of cost reporting periods or discharges (as the case may be) occurring during fiscal year 1989.”

(b) PROSPECTIVE PAYMENT FOR CAPITAL-RELATED COSTS.—

(1) IN GENERAL.—Paragraph (1) of section 1886(g) of such Act (42 U.S.C. 1395 ww (g)) is amended to read as follows:

“(g)(1)(A) Notwithstanding section 1861(u) instead of any amounts that are otherwise payable under this title with respect to the reasonable costs of subsection (d) hospitals and subsection (d) Puerto Rico hospitals for capital-related costs of inpatient hospital services, the Secretary shall, for hospital cost reporting periods beginning on or after October 1, 1991, provide for payments for such costs in accordance with a prospective payment system established by the Secretary.



APPENDIX B  
SCORE ADJUSTMENT PROCESS

## SCORE ADJUSTMENT PROCESS

This appendix documents how the scores were adjusted to account for the differences in the panel's approaches to scoring the applications, and how they were rescaled for easier interpretation.

To adjust the scores, we first calculated the mean and standard deviation of the total scores for all proposals reviewed for each panel. (There were 30 panels.) Next, we subtracted the panel mean from each individual score, and divided this difference by the panel standard deviation. Define  $X_{1p}$  as the individual proposal score assigned by the panel,  $X_p$  as the mean of all scores  $X_{1p}$  for that panel,  $S_p$  as the standard deviation of the panel mean, and  $N_p$  as the number of applications scored by the panel. The adjusted score ( $T_{1p}$ ) is then calculated as:

$$T_{1p} = (X_{1p} - X_p) / (S_p / \sqrt{N_p})$$

To rescale the adjusted scores so that they are easier to interpret, we first identified the maximum and minimum adjusted score across all applicants. Define  $T_{\max}$  as the maximum score, and  $T_{\min}$  as the minimum. The rescaled score is then calculated as:

$$\text{Score} = \frac{T_1 - T_{\min}}{T_{\max} - T_{\min}} * 100.$$

This rescaling process results in scores that range from 0 to 100, the same as the original range of the panel assigned scores, while maintaining the distribution and ranking of the adjusted scores.

APPENDIX C

LIST OF GRANT WINNERS BY STATE

Funds Awarded under Grant Program for Rural Health Care Transition

STATE	HOSPITAL	CITY	FIRST YEAR FUNDING LEVEL
AK	Wrangell General Hospital	Wrangell	50000
AL	Bibb Medical Center	Centreville	50000
AL	Fayette County Hospital	Fayette	50000
AL	Greene County Hospital	Eutaw	50000
AL	Hale County Hospital	Greensboro	50000
AR	Chicot Memorial Hospital	Lake Village	47300
AR	Corning Community Hospital, Inc.	Corning	50000
AR	Fulton County Hospital	Salem	50000
AR	Helena Regional Medical Center	Helena	50000
AR	Piggott Community Hospital	Piggott	50000
AR	Stuttgart Memorial Hospital	Stuttgart	50000
AR	Twin Rivers Medical Center	Arkadelphia	50000
AZ	Casa Grande Regional Medical Center	Casa Grande	50000
CA	John C. Fremont Hospital	Mariposa	50000
CA	Lakeside Community Hospital	Lakeport	50000
CA	Pioneers Memorial Hospital	Brawley	50000
CA	Redbud Community Hospital	Clearlake	50000
CO	Melissa Memorial Hospital	Holyoke	50000
CO	Pioneers Hospital of Rio Blanco Cty	Meeker	50000
CO	Rangely District Hospital	Rangely	50000
CO	Salida Hospital	Salida	50000
CO	Southeast Colorado Hospital	Springfield	50000
FL	Calhoun General Hospital	Blountstown	50000
GA	Marion County Hospital, Inc.	Buena Vista	50000
GA	Taylor Regional Hospital	Hawkinsville	50000
GA	Wills Memorial Hospital	Washington	50000
HI	Molokai General Hospital	Kaunakakai	50000
IA	Central Community Hospital	Elkader	49204
IA	Clarke County Hospital	Osceola	50000
IA	Mercy Hospital of Franciscan Sisters	Oelwein	50000
IA	Ringgold County Hospital	Mount Ayr	49115
IA	Skiff Medical Center	Newton	50000
ID	Bear Lake Memorial Hospital	Montpelier	50000
ID	Elmore Medical Center	Mountain Home	49800
ID	Gritman Memorial Hospital	Moscow	50000

Funds Awarded under Grant Program for Rural Health Care Transition

STATE	HOSPITAL	CITY	FIRST YEAR FUNDING LEVEL
IL	La Harpe Hospital Association	La Harpe	50000
IL	Massac Memorial Hospital	Metropolis	50000
IL	The Julia Rackley Perry Memorial	Princeton	45560
IL	Union County Hospital District	Anna	50000
IN	Adams County Memorial Hospital	Decatur	50000
IN	Blackford County Hospital	Hartford City	50000
IN	Putnam County Hospital	Greencastle	43261
KS	Allen County Hospital	Iola	50000
KS	Arkansas City Memorial Hospital	Arkansas City	50000
KS	Baxter Memorial Hospital	Baxter Springs	45190
KS	Bob Wilson Memorial Hospital	Ulysses	25000
KS	Minneola Hospital Dist. No. 2	Minneola	50000
KS	Phillips County Hospital	Phillipsburg	50000
KS	Salem Hospital, Inc.	Hillsboro	44183
KS	The Saint Mary Hospital	Manhattan	50000
KS	Wamego City Hospital	Wamego	50000
KY	Breckinridge Memorial Hospital, Inc.	Hardinsburg	50000
KY	Carroll County Memorial Hospital	Carrollton	50000
KY	Franklin Simpson Memorial Hospital	Dranklin	50000
KY	Our Lady of the Way Hospital	Martin	50000
LA	Riverland Medical Center	Ferriday	49096
LA	St. Helena Parish Hospital	Greensburg	50000
LA	St. Luke General Hospital	Arnaudville	50000
LA	West Carroll Memorial Hospital, Inc.	Oak Grove	50000
MD	Garrett County Memorial Hospital	Oakland	50000
ME	Blue Hill Memorial Hospital	Blue Hill	50000
MI	Charlevoix Area Hospital	Charlevoix	43400
MI	Mackinac Straits Hospital	St. Ignace	50000
MI	Mercy Hospital, Grayling	Grayling	50000
MI	Paul Oliver Memorial Hospital	Frankfort	45000
MN	Caledonia Health Care Center	Caledonia	39300
MN	Community Memorial Hospital	Winona	50000
MN	Cook County North Shore Hospital	Grand Marais	50000
MN	Karlstad Memorial Hospital	Karlstad	46500
MN	Kittson Memorial Hospital	Hallock	46500
MN	Northfield Hospital	Northfield	50000
MN	St. Mary's Hospital and Home	Winsted	50000
MN	St. Elizabeth Hospital & Nursing Home	Wabasha	50000
MN	Warren Community Hospital	Warren	50000

Funds Awarded under Grant Program for Rural Health Care Transition

STATE	HOSPITAL	CITY	FIRST YEAR FUNDING LEVEL
MO	Citizens Memorial Hospital	Bolivar	50000
MO	Hermann Area District Hospital	Hermann	50000
MO	Moberly Regional Medical Center	Moberly	50000
MO	Perry County Memorial Hospital	Perryville	49975
MS	Leake County Memorial Hospital	Carthage	50000
MS	Methodist Hospital of Middle MS. Inc	Lexington	50000
MS	Noxubee General Hospital	Macon	50000
MS	Webster General Hospital	Eupora	50000
MT	Broadwater Health Center	Townsend	50000
MT	Mountainview Memorial and Nursing Home	White Sulphur	50000
MT	St. Peter's Community Hospital	Helena	50000
MT	Teton Medical Center	Choteau	47935
NC	Ashe Memorial Hospital, Inc.	Jefferson	50000
NC	Blowing Rock Hospital	Blowing Rock	50000
NC	Murphy Medical Center	Murphy	38000
NC	Our Community Hospital	Scotland Neck	50000
ND	Community Memorial Hospital	Turtle Lake	50000
ND	Community Memorial Hospital	Hettinger	50000
ND	Griggs County Hospital & Nursing Home	Cooperstown	46550
ND	Mercy Hospital	Williston	50000
ND	Pembina County Memorial Hospital	Cavalier	49500
NE	Beatrice Community Hospital & Health	Beatrice	50000
NE	Boone County Community Hospital	Albion	25000
NE	Boone County Community Hospital	Albion	25000
NE	Great Plains Regional Medical Center	North Platte	48625
NE	Jennie M. Melham Memorial Medical Ctr.	Broken Bow	42250
NE	Thayer County Memorial Hospital	Hebron	50000
NH	Cottage Hospital	Woodsville	50000
NM	Socorro General Hospital	Socorro	38187
NM	Southwest Community Health Services	Belen	50000
NV	Churchill Regional Medical Center	Fallon	45250
NV	Elko General Hospital	Elko	45250
NV	Mt. Grant General Hospital	Hawthorne	45250
NV	Nye Regional Medical Center	Tonopah	45250
NY	Cuba Memorial Hospital	Cuba	50000
NY	Jones Memorial Hospital	Wellsville	50000
NY	Lewis County General Hospital	Lowville	49895
NY	Salamanca District Hospital	Salamanca	50000
NY	Tri-County Memorial Hospital	Gowanda	50000

**Funds Awarded under Grant Program for Rural Health Care Transition**

STATE	HOSPITAL	CITY	FIRST YEAR FUNDING LEVEL
OH	Highland District Hospital	Hillsboro	50000
OH	Pike Community Hospital	Waverly	50000
OK	Arbuckle Memorial Hospital	Sulphur	50000
OK	Atoka Memorial Hospital	Atoka	50000
OK	Community Hospital	Elk City	50000
OK	Grand Valley Hospital	Pryor	50000
OK	Lindsay Municipal Hospital	Lindsay	50000
OK	Okarche Memorial Hospital	Okarche	50000
OK	Stroud Municipal Hospital	Stroud	50000
OR	Blue Mountain Hospital	John Day	50000
OR	Mercy Medical Center	Roseburg	50000
OR	Mountain View Hospital & Nursing Home	Madras	50000
PA	Charles Cole Memorial Hospital	Coudersport	50000
PA	Troy Community Hospital	Troy	50000
PR	Castaner General Hospital, Inc.	Castaner	50000
SC	Union Hospital District	Union	50000
SD	Baptist Hospital of Winner	Winner	5555
SD	Baptist Hospital of Winner	Winner	15000
SD	Community Hospital	Wagner	5555
SD	Community Memorial Hospital	Burke	5555
SD	Community Memorial Hospital	Burke	15000
SD	Dakota Hospital	Vermillion	5555
SD	Douglas County Memorial Hospital	Armour	50000
SD	Freeman Community Hospital	Freeman	5555
SD	Gregory Community Hospital	Gregory	15000
SD	Landmann Jungman Hospital	Scotland	5555
SD	Methodist Hospital	Mitchell	50000

STATE	HOSPITAL	CITY	FIRST YEAR FUNDING LEVEL
SD	Pioneer Memorial Hospital	Viborg	5555
SD	St. Benedict Hospital	Parkston	5555
SD	St. Michael's Hospital	Tyndall	5555
TN	Claiborne County Hospital	Tazewell	50000
TN	LaFollette Community Hospital	LaFollette	50000
TN	Methodist Hospital of Somerville, Inc.	Somerville	50000



Funds Awarded under Grant Program for Rural Health Care Transition

STATE	HOSPITAL	CITY	FIRST YEAR FUNDING LEVEL
TX	Columbus Community Hospital	Columbus	50000
TX	Crosbyton Clinic Hospital	Crosbyton	50000
TX	Edgar B. Davis Memorial Hospital	Luling	49187
TX	Fisher County Hospital	Rotan	50000
TX	Goodall-Witcher Hospital Foundation	Clifton	49600
TX	Hansford County Hospital District	Spearman	50000
TX	Hill Country Memorial Hospital	Fredericksburg	50000
TX	Kimble Hospital	Junction	50000
TX	Memorial Hospital - El Campo	El Campo	41122
TX	Nocona General Hospital	Nocona	50000
TX	Palo Pinto General Hospital	Mineral Wells	50000
TX	Shepperd Memorial Hospital	Burnet	50000
TX	Smithville Hospital Authority	Smithville	50000
TX	Wilson Memorial Hospital	Floresville	50000
UT	Tooele Valley Regional Medical Ctr.	Tooele	50000
VA	Community Memorial Healthcenter	South Hill	50000
VA	Lee County Community Hospital	Pennington Gap	50000
VT	Copley Hospital, Inc.	Morrisville	10956
VT	Gifford Memorial Hospital	Randolph	10956
VT	North Country Hospital	Newport	10956
VT	Northwestern Medical Center	St. Albans	10956
WA	Odessa Memorial Hospital	Odessa	50000
WA	Samaritan Hospital	Moses Lake	50000
WA	Skyline Hospital	White Salmon	50000
WI	Adams County Memorial Health, Inc.	Friendship	50000
WI	Memorial Hospital of Boscobel	Boscobel	49993
WI	Memorial Hospital of Iowa County, Inc.	Dodgeville	50000
WI	Northwoods Hospital Association, Inc.	Phelps	16295
WI	Southwest Health Center, Inc.	Platteville	50000
WI	St. Joseph's Hospital	Arcadia	39400
WI	St. Mary's Hospital	Sparta	39400
WI	St. Mary's Kewaunee Area Memorial Hosp.	Kewaunee	47400
WV	Pocahontas Memorial Hospital	Marlinton	50000
WV	Preston Memorial Hospital	Kingwood	50000
WV	Sistersville General Hospital	Sistersville	50000
WV	Stonewall Jackson Memorial Hospital	Weston	50000
WY	Memorial Hospital of Carbon County	Rawlins	50000
WY	Memorial Hospital of Sweetwater Cnty.	Rock Springs	22900

**APPENDIX D**

**DATA SETS FOR THE ANALYSIS**

## DATA SETS FOR THE ANALYSIS

### A. IDENTIFYING THE SAMPLE SETS

To make the comparisons in Chapter III, four groups of hospitals were defined: (1) all eligible hospitals; (2) all applicant hospitals; (3) funded hospitals; and (4) non-funded hospitals.

The final total number of eligible hospitals was 1,815, and this figure has been used as the total number of eligible hospitals where area characteristics are compared in Chapter III.

HCFA reviewed 704 grant applications. From this set, all multiple applications were identified, and the duplicate hospitals were eliminated. A total of 677 unique hospitals comprise the set of hospitals that applied for a grant.

There were 184 applications selected to receive grant funding. Three hospitals (Boone County Community Hospital of Albion, Nebraska; Baptist Hospital of Winner, South Dakota; and Community Memorial Hospital of Burke, South Dakota) submitted two applications that were selected for grants resulting in 181 hospitals having 184 winning applications. These 181 hospitals comprise the set of funded grant hospitals.

To determine the unduplicated set of non-funded grants, we began with the set of 520 losing applications. In the seven instances where a hospital submitted both winning and losing proposals, the hospital was treated as a grant recipient for purposes of analysis, leaving 510 hospitals. The hospitals include:

<u>Hospital Name</u>	<u>Location</u>	<u>Number of Losing Applications</u>
Boone County Community Hospital	Albion, NE	2
Blowing Rock Hospital	Blowing Rock, NC	2
Broadwater Health Center	Townsend, MT	1
Crosbyton Clinic Hospital	Crosbyton, TX	1
Dakota Hospital	Vermillion, SD	1
Mountainview Memorial Hospital	White Sulphur Spr, MT	2
St. Benedict Hospital	Parkston, SD	1

The 14 hospitals that submitted two proposals, neither of which received grant awards, were considered one unique observation for analysis:

<u>Hospital Name</u>	<u>Location</u>	<u>Number of Applications</u>
Alleghany County Memorial Hospital	Sparta, NC	2 (loss)
Bonner General Hospital	Sandpoint, ID	2 (loss)
C.J. Harris Community Hospital	Sylva, NC	2 (loss)
Cannon Memorial Hospital	Banner Elk, NC	2 (loss)
Fullerton Memorial Hospital	Fullerton, NE	2 (loss)
Hemphill County Hospital	Canadian, TX	2 (loss)
Medical Arts Hospital	Lamesa, TX	2 (loss)
Permian General Hospital	Andrews, TX	2 (loss)
Roundup Memorial Hospital	Roundup, MT	2 (loss)
Sloop Memorial Hospital	Crossnore, NC	2 (loss)
Sweet Grass Community Hospital	Big Timber, MT	2 (loss)
Valley Regional Hospital	Claremont, NH	2 (loss)
Van Buren Community Hospital	Van Buren, ME	2 (loss)
Wheatland Memorial Hospital	Harlowton, MT	2 (loss)

This produced a set of 496 non-funded hospitals.

## B. DATA SOURCES FOR AREA CHARACTERISTICS ANALYSIS

The data used to analyze the area characteristics of grant applications and eligible hospitals was obtained from the Area Resource File (ARF). Hospitals were matched

to county characteristics contained in the ARF by the FIPS code of the county in which the hospital is located.

The ARF data set did not match exactly to the hospital list for two reasons. First, ARF does not contain data on Alaskan counties. Hence, the Alaskan hospitals were matched on a statewide basis. Second, ARF does not include data on U.S. territories. Hence, the five Puerto Rican grant applicants were not included in the analysis.

### C. PER POPULATION ESTIMATES

In a number of instances in Chapter III, information is presented on a "per population" basis. The population estimates used in the denominator of these variables are for the same year as the numerator variable.





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